

CIVIL AIR PATROL
Headquarters
Maryland Wing
P.O. Box 18341
Baltimore, MD 21240-8341

MDWG Supplement 1
CAPM 66 -1
3 February 02

Maintenance of CAP Aircraft

CIVIL AIR PATROL AIRCRAFT MAINTENANCE MANAGEMENT

CAPR 66-1, 1 February 00, is supplemented as follows:

2c. When an aircraft or its associated equipment requires repair or replacement parts, or when the aircraft or equipment is in a higher echelon shop for maintenance or repair, the wing commander, wing director of operations, or the wing maintenance officer are the **ONLY** personnel authorized to make purchasing transactions or check on the repair status progress of an aircraft or its associated equipment.

4a. Added. Squadrons are responsible for notifying the wing maintenance officer if any aircraft is REDLINED (out of service). This notification will include the cause, date and time of redline, and will be accomplished within 12 hours.

5a. Added. Pilots are reminded that all PREVENTATIVE MAINTENANCE is required by FAA REGULATION to be entered in the airframe logbook or the engine logbook. All entries should be as brief as possible but include all facts. VOR monthly checks will also be recorded on MDF 6, Aircraft Status & VOR Check Sheet. Aircraft discrepancies will be logged on MDF 8, SQUAWK SHEET, located

in the aircraft flight log. When the discrepancies have been

repaired or completed and signed off on the squawk sheet, this sheet will be submitted to wing along with the MDF 4.

8a(1). Added. Aircraft will have a monthly or 50 hour inspection performed by the squadron maintenance officer, recorded on MDF 4, and submitted to the wing maintenance officer by the 10th of the following month, or the aircraft will be REDLINED. Periodic, an unannounced inspections will be performed by wing/group personnel to ensure no improper maintenance or other aircraft operating procedures are being violated. If a violation is noted, the violator and aircraft commander will appear before the wing commander, director of operations and the wing maintenance officer to justify the reason for the violation.

8b(1) Added. Annual or 100 Hour Inspections. The aircraft commander of the aircraft requiring an annual or 100 hour inspection will furnish personnel to help in performing the owner-assisted inspection. The CESSNA 182 requires

24 man-hours and will need a crew of three to perform. The CESSNA 172 requires 16 man-hours and a crew of two. Aircraft commanders who fail to furnish the required crew will be charged \$24.00 per hour. Crew members assisting in the inspection will receive one hour flying in the aircraft as compensation. This time will be logged in the MDF 91 as a maintenance flight and the individuals reimbursed for the fuel. The actual flight to the maintenance shop and back will be logged as a maintenance flight on the MDF 91 and Maryland Wing will reimburse the crew for the fuel used for this flight.

14. The wing finance officer will maintain a system of subaccounts to record all funds received and disbursed for each aircraft. All disbursements will be covered by purchase orders, identifying aircraft by tail number, and will be signed by the wing commander.

14b(1). Added. The following maintenance rates are established for corporate aircraft assigned to Maryland Wing. These rates are effective as of 1 February 2002.

(1) Cessna 172: \$15.00 per Hobbs hour

(2) Cessna 182: \$17.00 per Hobbs hour

The "Wet" rental rate will be determined by the squadron the aircraft is assigned to, based on local gas cost and squadron level maintenance. All Civil Air Patrol members will be charged the same established "wet" rate, regardless of unit assignment. No member can be charged more or less than any other member.

14d. Added. All costs associated with aircraft hangar and/or tie-down facilities are the responsibility of the assigned squadron. Each unit operating a Corporate Aircraft is required to pay into the Aircraft Maintenance Fund, at the end of each month, a sum of money equal to all of the chargeable flying time for that month times the assigned maintenance rate. Payment will be made when filing the monthly MDF 3.

JOHN F. REUTEMANN III, C/Lt Col, CAP
Administrative Officer

LAWRENCE L. TRICK, Col, CAP
Commander

3 Attachments:

1. MDWGF 4
2. MDWGF 6
3. MDWGF 8

Aircraft Monthly Maintenance Inspection Report

This report is the 50-hour inspection items. Submit the report to the Wing Aircraft Maintenance Officer no later than the tenth day of the succeeding month

Date performed		Aircraft Number	
Performed by		Tach Time	

EQUIPMENT		STATUS	
Propeller	Inspect spinner and backing plates for cracks		
	Inspect blades for nicks/cracks/deformities		
Engine	Remove and inspect engine cowling		
	**Drain Oil (A/C with no filter, at 25 hours)		
	**Replace Filter		
	Inspect oil temp/pressure sensor for leaks		
	Inspect oil lines for leaks, cracks, chafing		
	**Replace oil using 15W50 Aeroshell-W-Multigrade		
	**Remove, clean, gap, and reinstall lower spark plugs in top and top plugs where the lower ones were		
	Insp. plug wire leads and ceramics for cracks/scorching/corrosion/deposit		
	Check air filter (Note: if paper element, check to assure less than 500 hours in service per air filter A.D.) DO NOT REMOVE BRACKET FILTERS, inspect only		
	Inspect carb heat door and box		
	Inspect air inlet ducts and carb heat hose		
	**Clean fuel filter bowl and screen (Pipers)		
	Check brake reservoir, fill as required		
	Check engine for:		
	Loose or broken baffle bolts		
	Broken safety wire		
	Oil leaks, particularly rocker box and prop seal		
	Mag security		
	Evidence of muffler/exhaust leaks		
	Loose or missing exhaust manifold nuts		
	Security of oil filter tube		
	Loose or leaking primer lines		
	Bent, cracked or chafing of engine mounts		
	Check security/operation of engine controls/alternate air source controls		
	Check to assure all tools and parts are removed		
	Aircraft Area and Airframe	Wash aircraft	
		A/C mooring area clean, policed, and grass cut	
		Tie-down ropes and chocks for all 3 wheels	
		Check and fill battery as required	
Check battery for leaks, corrosion, faulty wiring, potential shorts			
Check static port, pitot tube and cover			
Check antennae for security and cleanliness			
Check fuel vent ports			
Check condition and security of fuel tank caps			
Check ELT battery, antenna for and wiring for security			
Check landing gear struts for proper extension/leaks			
Check shimmy dampener			
Inspect wheels for cracks, corrosion, broken bolts			
Check gear lines for cracks, chafing, wear			
Check tires for inflation/condition: Rt main, Lt main, and Nose			
Check brake linings for wear/condition: Right inner and outer, Left inner and outer			

Perform Normal Preflight	Use Aircraft manual				
Inside	Check all lights: navigation beacon, landing, taxi, landing gear, instrument, radio, dome strobe, night (red) instruments, and compass				
	Check fire extinguisher				
	Chocks (3 pair) and tie-down ropes				
	All CAP required placards				
	Cleanliness of A/C: Upholstery, windows, mats, etc.				
	Check seat rails and seat latches for security and proper function				
	Check seat belts for security				
Operational Check	Check fuel selector for positive detents				
	Check fuel pump operation and pressure (Piper)				
	Check oil pressure				
	Check alternator output				
	Check alternate static source				
	Check parking brake (Note: assure brake not left on as it can lock up)				
	Check vacuum gauge and low vacuum light				
	Check gyros for noise and roughness. Horizon should erect during run up				
	Check cabin heat				
	Check mags (Note: Most Lycomings require no more than 125rpm drop and less than 50 rpm between mags. If a problem is suspected, perform full power run up. Mag drops should be 125/50 and should be 2250 or higher)				
	Check that key cannot be removed in any position but off				
	Check engine idle speed (no more than 750rpm, no less than 550rpm)				
	Check throttle, mixture, and carb heat/alternate air				
	Check control movement				
	Post flight aircraft. Use aircraft manual. Be sure to check for oil leaks				
Logbooks	Reinstall cowling				
	Check due dates of the following and record:				
Annual Inspection	Due Date		100 Hour Inspection	Due Date	
Pitot/Static System	Due Date		Altimeter	Due Date	
Transponder/Encoder	Due Date		ELT	Due Date	
Other	Note any other discrepancies or potential hazards here. (if more room is needed attach separate sheet)				
Corrective action taken. (Note: the entire month of Squawk sheets MDF 8, should be submitted with this monthly inspection. If squawks still exist, record such on new monthly Squawk form.					
Signature of inspector					Date

Aircraft Status and VOR Check sheet			Aircraft tail #	
	Last Completed Tach Time	Last Completed Date	Next Due Tach Time	Next Due Date
Annual Inspection				
100 Hr. Inspection				
Transponder Check				
Static/Alt. Check				
ELT Battery				
Oil Change				
Carbon Monoxide Detector				
Wash / Wax				
Corrosion Control				

1. 100 Hr./ Annual inspections **WILL NOT** exceed the 100 Hr. Limit, except to fly to maintenance shop.
2. 50 Hr. Oil changes can be completed “+ or -” 5 Hrs. of the 50 Hr. mark.
3. Oil changes are to be done at 50 Hrs. or 4 months, which ever comes first. **Do not** exceed 4 months.
4. Carbon Monoxide Detectors are to be replaced every 12 months.
5. Waxing should be accomplished every 6 months. Wash as often as needed.
6. Corrosion Control is to be done yearly.

THIS FORM WILL BE SUBMITTED TO WING MONTHLY

Date	Checkpoint / Method	#1 Error	#2 Error	Signature

SQUAWK SHEET

1. Record here all problems encountered with the aircraft and its equipment. Be as specific as you can. Enter your name and telephone number so that you can be contacted for further information.

2. If you believe that the problem makes the aircraft not airworthy and that it should be grounded, place the “GROUNDED” placard located in the front pocket of this notebook out in the cockpit in clear view of other pilots.

3. Contact the WING maintenance officer and squadron AIRCRAFT COMMANDER to make them aware of the problem. This is particularly important if you have grounded the aircraft.

DATE:	PROBLEM:	NAME:
		TELEPHONE:
CORRECTIVE ACTION TAKEN:		
SIGNATURE OF PERSON TAKING ACTION:		DATE:
DATE:	PROBLEM:	NAME:
		TELEPHONE:
CORRECTIVE ACTION TAKEN:		
SIGNATURE OF PERSON TAKING ACTION:		DATE:
DATE:	PROBLEM:	NAME:
		TELEPHONE:
CORRECTIVE ACTION TAKEN:		
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